The Field Museum

Natural News

Weekly Staff Newsletter
February 9, 2001

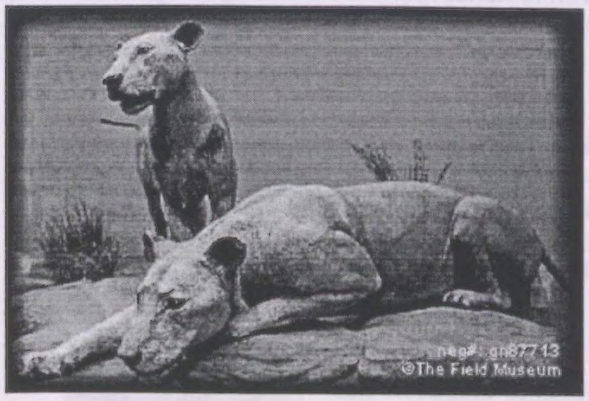
Field Museum Researchers Sink Teeth into Science

Anthropology, botany, geology, zoology...dentistry? Are the dental sciences becoming to The Field Museum what Billy Preston was to the Beatles?*

Perhaps not. But in the cover stories of two recent publications, Field Museum scientists and colleagues examine some significant sets of pearly-whites in their pursuit of natural history.

In the December 2000 issue of *The New York State Dental Journal*, **Bruce Patterson**, MacAurthur Curator of Mammals, and E.J. Neiburger, D.D.S. (a Waukegan, IL dentist) discuss forensic dental evidence that might explain why the famed *Lions of Tsavo* and *The Man-eater of Mfuwe* hunted human prey.

In 1898-99, two maneless lions terrorized workers building the Uganda Railway in what is now southeastern Kenya. By the time they were felled by Lt. Col. J.H. Patterson (no relation to the co-author of the article) the lions had devoured 135 men. In 1991, another lion killed at least six people in Mfuwe, Zambia, until it was shot by hunter Wayne Hosek. Hosek subsequently donated the "man-eater" to The Field Museum in 1998.



Lions depend on strong jaws and teeth to seize and kill their prey. According to the article, *The Man-eaters with bad teeth*, (*NYSDJ*, Vol. 66, No. 10, pp. 26-9) injuries, old age and illness are often cited as

(see ***Teeth*** next page)

FIELD NOTES

Week of February 12, 2001

Staff/Volunteer Events

Tae Bo Class
• Monday, 5 p.m., Ground Floor

Aerobics Class
• Tuesday, 5 p.m., Ground Floor
• Thursday, 5 p.m., Ground Floor

Green Sheet Meeting
• Wednesday, 3 p.m., FP&O Conference Room

Staff and Volunteer Movie Night
• Wednesday, 5 p.m., Montgomery Ward Hall

Public/Campus Events

Kremlin Gold
• Exhibit continues

Kachinas
• Exhibit continues

Between Cultures
• Exhibit Continues

©Photo Courtesy of Gina J. Grillo

The Natural News *is published by the Human Resources Department.*

Submissions can be emailed to Mark Schmeltzer (schmeltz@fmnh.org) Or delivered to him via interoffice mail to the Office of Institutional Advancement

The deadline for next week's issue is WEDNESDAY, February 14, at noon.

***Teeth** (continued from front page).*

conditions that predispose hungry predators to choose "alternative diets" (p.27). Patterson and Nieburger examined the skulls of the lions and concluded that all three had oral abnormalities severe enough to have caused them to favor slower, weaker prey—like humans—over faster, stronger prey.

The cover story of the January 25, 2001 issue of *Nature*, describes an extraordinary find by a team that included Scott Sampson and Field Museum research associates **Matt Carrano** and **Catherine Foster**. While digging near the village of Berivotra in northwestern Madagascar, the team uncovered a previously unknown, small-bodied predatory dinosaur with an unusual bite.

In *A bizarre predatory dinosaur from the Late Cretaceous of Madagascar* (*Nature*, vol. 409, issue no. 6891, pp. 504-6), the team describes *Masiakasaurus knopfleri.* This new type specimen is the first known theropod (a group of small to huge meat-eating, carnivorous dinosaurs that includes the famous species *Tyrannosaurus rex*, like Sue) exhibiting "highly procumbent and distinctly heterodont lower detention." As the images accompanying the article make clear, "highly procumbent" means that the dinosaur's lower front teeth jutted forward considerably. This kind of dental structure was previously unknown in dinosaurs of its kind. According to the article, modern mammals with this type of dentition are often insectivorous and use these forward-leaning teeth to secure prey.

The dental differentiation displayed by the specimen is also unique. In other words, the animal had teeth of many different types and shapes in different areas of its mouth. According to the article, the degree of dental differentiation in this specimen is rare in theropod-type dinosaurs (but common in our group—mammals).

Because it shares similarities with certain dinosaurs found in Argentina, *Masiakasaurus* may also provide windows into the geographic distribution of a particular family of theropod dinosaurs (*Abelisauroidae)* across the Gondwanan super-continent during the late Cretaceous.

The origin of *Masiakasaurus knopfleri*'s name is also worth mentioning here. According to the description, *masiaka* is from Malagasy meaning "vicious." *Sauros*, as you might know, is Greek for "lizard." And *knopfleri*? The name was given to honor rock musician and former Dire Straits front man Mark Knopfler (left), whose music inspired the team working on the excavations.

The overall field project is led by Field Museum research associate **David Krause**. The Museum is also part of this broader partnership with the Université d'Antananarivo, through its assistance with the preparation of the specimens and as the permanent repository for specimens that will be housed in a U.S. collection (including some of the fossils described in the paper.) This program was one of several Field Museum partnerships with institutions in Madagascar.

*(*Keyboardist Billy Preston is sometimes called "the Fifth Beatle," though he also performed with such greats as Mahalia Jackson, Sam Cooke, Ray Charles and Little Richard.)*

New Staff Member in HR

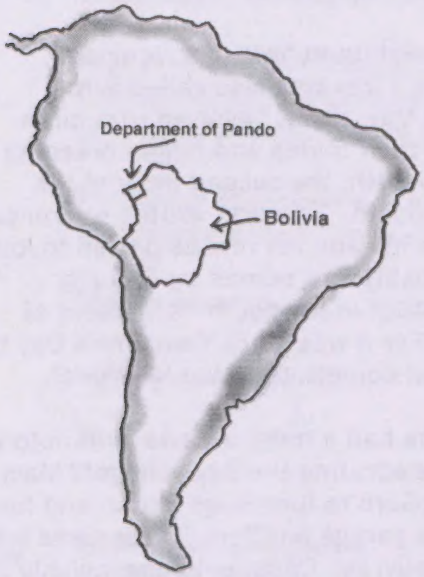
The Human Resources Department is delighted to announce the addition of a new staff member. **Myra Dunbar** has stepped in as the new Staffing Specialist/Event coordinator. In addition to recruitment and staffing issues, Myra will be organizing our Staff and Volunteers events, such as our annual Holiday Celebration, Service Recognition Ceremony, movie nights and exhibit previews.

Myra is a graduate of Hampton University in Hampton, Virginia and was most recently employed at the Chicago Tribune. If you need to reach Myra please call ext. 7274 or come down to the HR offices.

Submitted by **Sam Burns**

Pando Update

Dan Brinkmeier (Environmental and Conservation Programs) and **Alaka Wali** (Center for Cultural Understanding and Change) just returned after several weeks conducting an assessment of social and cultural assets in the Department of Pando, Bolivia. A follow-up to an earlier trip there by Field Museum staff last May, this trip continued the efforts to conserve the area's biological riches—efforts that began with The Field Museum-led Rapid Biological Inventory of the Río Tahuamanu area in late1999.



Brinkmeier and Wali talked with communities in areas of extractive reserves located near the city of Cobija and they laid the groundwork for several community conservation projects, environmental education initiatives, and joint collaborations with the university and local communities of western Pando. Brinkmeier and Wali finished up their trip with a Saturday workshop on social inventories and communication for university students and staff.

Ahh, Summer!

Here's something to give you warm thoughts.

Our Summer Hours will be from May 28, 2001 through September 3, 2001 from 8:00am to 5:00 pm.

We will start our Summer Hours on May 28, 2001 and we will have Summer Hours on September 3, 2001.

Submitted by **Diane White**

Baker's Corner

Paul Baker

Not everything is as it seems. Especially this time of year. I used to think that "St. Valentine" was this guy wasting away in prison, writing love letters to an unknown, un-requited love. No way in a flying wheelbarrow!

Valentine's Day grew out of a tradition that began many years ago in ancient Rome. The feast of Lupercalia was celebrated on February 15, and involved the celebration of fertility honoring two Roman gods, Juno and Pan. One of the conventions of this occasion called for young maidens to write love messages which were placed in a large urn. Young unmarried men would then draw out a missive and court the fair maiden who wrote it.

In ancient Rome there lived a man named Valentine. He was a kind-hearted physician who practiced medicine out of a small room in his home. One might even describe him as "a gastronomic physician" because of his purported love of food and cooking. "Dr." Valentine always made a special effort to offer his patients medicines that tasted delicious. He would take care to mix bitter tasting medicines with wine, milk or honey to make them more palatable for the sick and injured (much as my mother would mash aspirins and cover them in chocolate syrup). He cleansed wounds with wine vinegar and would use freshly ground herbs and roots to relieve pain.

Valentine also became a Christian priest and would pray for the health of his patients. One day a jailer for the Emperor of Rome knocked at Valentine's door clutching his blind daughter in his arms. He appealed to Valentine to treat his daughter's blindness. The little girl was examined, given an ointment for her eyes and a series of re-visits were scheduled. The girl's sight was not restored. Roman soldiers arrested him, destroyed his medicines and admonished him for his religious views. Knowing his execution was imminent, Valentine asked the jailer for a paper, pen and ink. He quickly jotted a farewell note and handed it to the jailer to give to his blind daughter. Valentine was executed later that day, on February 14, 270 (AD) by the order of Emperor Claudius II Gothicus.

In short, Valentine was made a saint and Pope Gelasius I named February 14 as Saint Valentine's Day. The Church instructed the masses to celebrate their day instead of the pagan Lupercalia, and then, oops; St. Valentine was dropped from the liturgical calendar in 1969, probably because an even bigger power—the combined force of the card and candy compainies—convinced the masses to worship selfish phrases and gooey foodstuffs.

It is interesting to note that, long ago, Valentine's Day was also called Birds' Wedding Day. It was believed that birds selected their mates and began breeding on February 14th, the second week of the second month. The first written reference to St. Valentine and his role as patron to lovers was probably first coined by Chaucer (1340-1400) in his poem Parliament of Foules: "For it was on St Valentine's Day that every fowl cometh to chose his mate".

Al Capone had a most unusual and notorious way of celebrating the day. He got "Machine Gun" McGurn to lure Bugs Moran and his boys to a garage on Clark St. for some lead hors d'oeuvres. Capone, lolling lavishly in Florida probably had a fabulous dinner and gave his moll the obligatory candy and flowers.

No moll? No bird partner? This Wednesday, take yourself out to the best restaurant you can afford and celebrate a man who only wanted to do good through "gastronomic medicine". Order the mousse.

TEXAS CAPITOL GIFT SHOPS
State Preservation Board

January 27, 2001

Laura Sadler, Director, Auxiliary Services
The Field Museum
1400 S.Lakeshore Dr.
Chicago, Il. 60605-2827

Dear Ms. Sadler,

My name is Shawn Goodnight, I am the Retail Director for the Texas State Preservation Board which includes the Capitol Giftshops and the Texas State History Museum Store.

On a recent trip to Chicago, I had the opportunity to stop in your store at The Field Museum. I would like to compliment you on your operation. The quality of your merchandise and your friendly staff made my experience in your store a pleasurable one.

If you ever find yourself in Austin, Texas, I would love to hear from you. I would love the opportunity to show you our State Capitol and the Texas State History Museum.

My compliments,

S Goodnight

Shawn Goodnight
Retail Director

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PO Box 13286
Austin, Texas 78711

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shawn.goodnight@tspb.state.tx.us

Business Office:

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Phone: 512/305-8400
Fax: 512/475-3184

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Phone: 512/475-2167
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112 East 11th Street
Austin, Texas 78701

Phone: 512/305-8408
Fax: 512/475-3184

Tired of all the commercialism of Valentine's Day? Tired of trying to find the perfect gift for someone you don't even like? Tired of answering the question; 'So what are *your* plans for Valentine's Day?'.

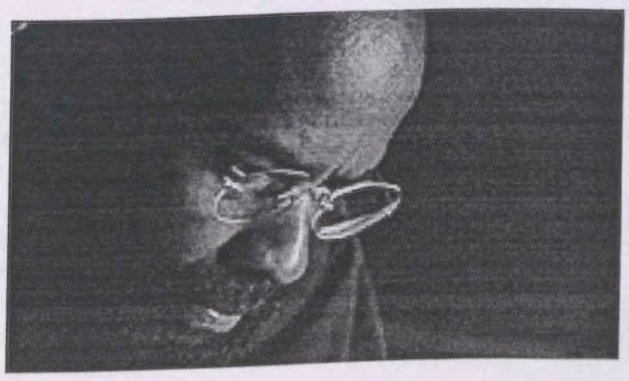
Well, do we have something for you!!!
Come join the Human Resources Department as we celebrate our Un-Valentine's Day by holding another

STAFF AND VOLUNTEER MOVIE NIGHT!

WHEN: Wednesday, February 14, 2001
WHERE: Montgomery Ward Hall(Lecture Hall I)
TIME: Food served at 5:00pm
Movie begins at 6:00pm

Our feature presentation is...

THE HURRICANE



FREE FOOD, SODA - $1.00, BEER & WINE - $2.00